

REMARKS

This paper is being provided in response to the Final Office Action mailed September 8, 2006, for the above-referenced application. Applicant has cancelled claims 14 and 21 without prejudice or disclaimer of the subject matter thereof and amended here claims 1, 11, 15, 19 and 22 to clarify that which Applicant considers to be the claimed invention. Applicant respectfully submits that the amendments to the claim are fully supported by the originally-filed specification.

Applicant has maintained withdrawn method claims 19, 20 and 22-25 in the present application. Applicant submits that upon allowance of claims to the elected apparatus, withdrawn method claims for making or using the apparatus and including all of the features of the allowed apparatus claim may be rejoined to the application as provided under MPEP 821.04(b). Applicant has amended withdrawn claim 19 consistent with other amendments made herein.

The rejection of claims 1-18 under 102(b) as being anticipated by DE 196 52 584 to Kassner, et al. (hereinafter "DE '584") or, in the alternative, under 35 U.S.C. 103(a) as being obvious thereover, is hereby traversed and reconsideration is respectfully requested in view of the amendments to the claims contained herein.

Independent claim 1, as amended herein, recites a reinforcement grid for bituminous layers. The reinforcement grid includes intersecting strands made of a synthetic material,

wherein the strands made of a synthetic material have a ductile yield greater than 3% and less than 6% Claims 2-10 depend directly or indirectly from independent claim 1.

Independent claim 11 recites a reinforcement grid for a bituminous layer. The reinforcement grid includes at least two intersecting strands including a synthetic material, wherein the at least two intersecting strands have a ductile yield that corresponds to a ductile yield of the bituminous layer. Claims 13 and 15-18 depend directly or indirectly from independent claim 13.

The DE '584 reference discloses a textile netting for reinforcing layers connected by bitumen.

The Office Action (top of page 3) recognizes that DE '584 does not explicitly teach Applicant's claimed ductile yield properties for a reinforcement grid, either as a specific percentage or that corresponds approximately to a ductile yield of a bituminous layer, among other features. The Office Action states that it is reasonable to presume that these properties are inherent to the netting of DE '584. Applicant respectfully traverses this conclusion, as detailed below.

Specifically, Applicant has discovered that a reinforcement grid having features as presently claimed concerning ductile properties has good elastic deformability and is capable of absorbing high forces applied to a bituminous layer. (See, for example, page 3, lines 15-25 of the present application.) Consequently, a reinforcement grid according to Applicant's presently

claimed invention deforms to absorb shearing forces that occur during installation and due to loads and temperature fluctuations without causing damage to the bituminous layer. (See page 4, lines 7-12 of the present application.)

The Office Action states the presumption that a grid as described by DE' 584 reference has the same ductile yield range as claimed by Applicant is determined based on the use of like materials as Applicant's claimed grid, including the use of polyvinyl alcohol (PVA) (see page 3 of the Office Action). As a procedural matter, Applicant again points out that the DE '584 reference does not, in fact, cite the use of polyvinyl alcohol. The use of polyvinyl alcohol is first cited in the published PCT application claiming priority to the DE '584 reference (WO 98/27282, published June 25, 1998 – corresponding English equivalents of the WO 98/27282 reference are US 6,503,853 and US 6,789,798). Applicant addresses all of these references herein.

Applicant refers to the document entitled Kuralon Filament by Kuraray Co., Ltd, previously provided in an Information Disclosure Statement by Applicant. As seen on page 3 of the Kuralon Filament document, the ductile yields (listed as "Elongation at break") for various yarn types range from 6.7% to 13.5%. Although Applicant submits that a stated ductile yield range of 6.7% to 13.5% for known Kuralon (PVA) filament yarn does not necessarily anticipate a different and explicit ductile yield range (for example, 3% to 8%) even though portions of the ranges may overlap, Applicants have amended the independent claims to recite herein a range for a ductile yield of intersecting strands of a reinforcement grid for bituminous layers that is greater than 3% and less than 6%. Applicant submits that this range is supported by the originally-filed

specification in which a ductile yield of 3% is described as a desirable lower bound and 6% is described as a desirable upper bound. (See, for example, page 3, lines 24-25 and page 4, lines 24-26 of the originally-filed specification.) Applicant submits that this range does not overlap at all with the range for PVA filament yarn disclosed in Kuralon.

Addressing the statement that the use of a PVA lattice renders as inherent Applicant's claimed ductile yield range for a reinforcement grid, Applicant refers to the Kuralon document in which several types of Kuralon (PVA) filament yarn with different characteristics are described and a ductile yield range of 6.7% to 13.5% is disclosed. The Office Action suggests that Applicant has not shown that the threads of DE '584 do not have the claimed ductile yield range based on a line of reasoning that the ductile yield range claimed by Applicant would be inherent to DE '584. In view the Kuralon reference, Applicant traverses this argument.

The Office Action cites a variety of different characteristics (i.e. polyvinyl alcohol lattice, nonwoven backing, bonding substance, and binding threads) of the lattice disclosed in DE '584 (noting, as discussed above, that a polyvinyl alcohol lattice does not appear in the DE '584 reference); however, the Office Action contains no discussion or support of how the mention of various characteristics necessarily renders as inherent Applicant's claimed ductile yield range. Applicant submits that stating a laundry list of different characteristics without further information does not necessarily render as obvious a specific combination and identification of characteristics to yield an explicitly recited result.

As noted above, Applicant has provided the Kuralon reference that discloses PVA filament yarns with a ductile yield range of 6.7% to 13.5%. In view of the amendments to the claims contained herein, this range does not overlap at all with the range recited by Applicant in claim 1 of greater than 3% and less than 6%. Applicant's claimed ductile yield range can, therefore, not simply be rejected as "inherent" when a wholly different ductile yield range of PVA filament yarns has been supported by evidence in the prior art. Applicant also notes that the Office Action does not appear to address the subject matter recited in dependent claims 2 and 15 in which are recited a ductile yield range of between 5% and 6%. Thus, in view of the Kuralon reference, Applicant has shown that an argument that Applicant's claimed ranges are inherent is flawed and cannot be sustained.

Accordingly, Applicant submits that one of ordinary skill in the art would not inherently derive Applicant's claimed ductile yield range from the simple teaching of the use of PVA yarns. Thus, Applicant respectfully submits that the DE '584 reference, the WO 98/27282 reference and the corresponding US English equivalent references do not teach or fairly suggest the above-noted features for a reinforcement gird for bituminous layers, as claimed by Applicant. In view of the above, Applicant respectfully request that the rejections be reconsidered and withdrawn.

Based on the above, Applicant respectfully requests that the Examiner reconsider and withdraw all outstanding rejections and objections. Favorable consideration and allowance are earnestly solicited. Should there be any questions after reviewing this paper, the Examiner is invited to contact the undersigned at 508-898-8603.

Respectfully submitted,
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